

ABSTRACT OF THE DISCLOSURE

A crystalline semiconductor film in which the position and the size of crystal grains are controlled is provided, and a TFT that can operate at high speed is obtained by forming a channel formation region of the TFT from the crystalline semiconductor film. A heat retaining film is formed on an insulating surface, a semiconductor film is formed to cover the heat retaining film, and a reflective film is formed to partially cover the semiconductor film. The reflective films and the semiconductor film are irradiated with a laser beam. The reflective film creates a distribution in effective irradiation intensity of laser beam on the semiconductor film. The distribution, with the heat retaining effect provided by the heat retaining film, generates a temperature gradient in the semiconductor film. Utilizing these, the position where crystal nuclei are to be generated and the direction in which crystal growth should advance can be controlled and crystal grains having a large grain size can be obtained.